



THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No. : 09/730,927 Confirmation No.: 7962
Appellants : Kazuhiro Kusuda et al.
Filed : December 6, 2000
TC/A.U. : 3714
Examiner : A. J. Capron

Docket No. : 00-737
Customer No. : 34704

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

RECEIVED
AUG 03 2004
TECHNOLOGY CENTER R3700

APPEAL BRIEF

Dear Sir:

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner dated July 25, 2003, finally rejecting claims 1-10.

REAL PARTY IN INTEREST

The real party in interest is the Assignee Konami Corporation.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant or Appellant's legal representative which will directly affect or be directly affected by or have a bearing on the Board of Appeals decision in the instant appeal.

07/29/2004 MAHME1 00000018 09730927

02 FC:1402
03 FC:1403

330.00 OP
~~290.00 OP~~

STATUS OF CLAIMS

Claims 1-10, all of the claims pending in the instant application, are rejected and are on appeal. A true copy of the claims on appeal are attached hereto in Appendix A.

STATUS OF AMENDMENTS

No amendment was filed subsequent to the Examiner's FINAL rejection. Appellants Request for Reconsideration filed subsequent to the Examiner's final rejection was considered and in accordance with the Advisory Action mailed by the Examiner on January 5, 2004, the Request for Reconsideration will be entered for purposes of this appeal.

SUMMARY OF INVENTION

The present invention relates to gaming machines in which racing, such as horse racing, bicycle racing, boat racing, and dog racing, is modeled and bettors predict the order of finish of objects, such as model horses running on tracks in a race, and bet on the race. A dividend is paid to the bettors who have correctly predicted the winner, the dividend being the product of a bet amount and odds on the winner. The objects are not limited to models, and they include images displayed on a display monitor.

In accordance with the principal object of the present invention, means are provided for correcting the probability of winning and the odds on each bet so as to keep a payout rate for each bet within a predetermined range of a target payout rate even when the odds computed based on a preset probability of winning and the target payout rate are rounded. (See the paragraph bridging Pages 2 and 3 of the specification) A further object of the present invention is to correct the probability of winning and the odds on each bet so as to keep a payout rate for each bet within a predetermined range of a target payout rate even when the odds computer based on the preset probability of winning and the target rate around it. Page 7, lines 3-9 in order to achieve the foregoing objects, the present invention comprises a first and second correction unit. A first correction unit approximately corrects the odds on the object in the highest place to odds with a predetermined number of digits, corrects the probability of winning of the object in the highest place based on the corrected odds, reflects the differences between the uncorrected probability of winning and the corrected probability of winning of the object in the probability of winning of the object in the subsequent place, redetermines provisional odds on the object in the subsequent place based on the corrected probability of winning of the object in the subsequent place, and repetitively performs the

whole processing for the objects in all places. A second correction unit approximately corrects the redetermined odds on the object in last place to odds with a predetermined number of digits, redetermines the probability of winning based on the approximated odds, and again reflects the difference between the probability of winning and the redetermined probability of winning at predetermined ratios in the probabilities of winning of all the objects. See Page 7 line 22 through Page 8 line 16.

In accordance with the present invention, the gaming machine and method further includes a determining unit for determining whether a payout rate based on the corrected probabilities of winning and the corrected odds is within a predetermined allowable range of the target payout rate. When the determination by the determining unit is negative, the dividend determining unit may reset the probabilities of winning and may perform the processing again. See the paragraph bridging Pages 8 and 9.

By providing the first and second correction units and the determining unit in the machine and method of the present invention a very critical problem associated with prior art machines is overcome. In prior art machines, although the probability of winning each race is an internal numeral and hence not easily predictable by the bettors, prediction can be performed to a certain extent by statistically examining the

results of many races. Since the odds are disclosed, it is possible to predict the payout rate. Accordingly, when a bettor recognizes that there is a horse with a payout rate of more than 100%, the bettor will most certainly place a bet on that horse. Such settings are not favorable for the owner of the gaming machine. By providing the correction units and determining unit as noted above, this unfavorable result is overcome.

PRIOR ART RELIED UPON BY EXAMINER

| Patent No. | Patentee | Issue/Publication Date |
|------------|----------|------------------------|
| 5,564,977 | Algie | October 15, 1996 |

REJECTIONS OF RECORD

All of the claims on appeal, claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Algie (U.S. Patent No. 5,564,977).

ISSUE ON APPEAL

The sole issue on Appeal is whether U.S. Patent 5,564,977 to Algie anticipates the claimed subject matter of claims 1-10 on Appeal.

GROUPING OF CLAIMS

Claims 1, 5, 6, 7 and 9 are independent claims and, therefore, each must be considered separately in their own right. In addition, dependent claims 2-4, 8 and 10 contain patentable merit in their own right and should be considered separately.

ARGUMENT

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F .3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in In re Oelrich, 666 F .2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansgirk v. Kemmer, 102 F .2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Thus, a prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it. See in re Oelrich 666 F .2d at 581, 212 USPQ at 326; Verdegaal Bros., Inc. v. Union Oil Co.,

814 F .2d 628, 630, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. See In re King, 801 F .2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). However, inherency is not necessarily coterminous with the knowledge of those ordinary skill in the art. See Mehl/Biophole Int'l Corp. v. Milgraum, 192 F .3d 1362, 1365, 52 USPQ2d 1303, 1305-06 (Fed. Cir. 1999); Atlas Powder Co. v. Ireco Inc., 190 F .3d 1342, 1347, 51 USPQ2d 1943, 1946-47 (Fed. Cir. 1999).

I. CLAIMS 1-5 DRAWN TO A GAMING MACHINE ARE NOT
ANTICIPATED UNDER 35 U.S.C. 102(B) BY U.S. PATENT
5,564,977.

As noted above, the present invention recognizes and overcomes a problem associated with the prior art. See Page 6, line 5 through Page 7 line 7 of the specification. The object which is achieved by the present invention is to provide a game machine which includes means for correcting the probability of winning and the odds on each bet so as to keep a payout rate for each bet within a predetermined range of a target payout even when the odds computed based on a preset provability of winning and the target payout rate are rounded. Both independent claims 1 and 5 set forth a first correction means and a second

correction means which together obtain the foregoing object. The object obtained by the present invention is totally different from that described by Algie in column 1 line 57 through column 2 line 13 of the '977 patent. It is submitted that Algie does not recognize the problem to which the claimed invention is drawn nor does Algie provide the first and second correction means for overcoming the aforesaid problem as claimed in independent claims 1 and 5.

The first correction means and the second correction means as specified in independent claims 1 and 5 are as follows:

"...correcting the probability of winning of the object in the highest place based on the corrected odds, reflecting the difference between an uncorrected probability of winning and the corrected probability of winning of the object in the probability of winning of the object in a subsequent place, predetermined (redetermining) the odds on the object in the subsequent place based on the corrected probability of winning of the object in the subsequent place, and repetitively performing a whole processing for the objects in all places
(second correction means)

predetermining (redetermining) the probability of winning based on the approximated odds, and again reflecting the difference between the probability of winning and the predetermined (redetermined) probability of winning at predetermined ratios in the probabilities of winning of all the objects."

The claimed invention is now compared with the teachings and disclosure of the Algie reference as set forth below:

(1) First, Algie fails to disclose the essential feature or construction of the present application, i.e. reflecting the difference between an uncorrected probability of winning and the corrected probability of winning of the object in the probability of winning of the object in a

subsequent place, and again reflecting the difference between the probability of winning and the predetermined (redetermined) probability of winning at predetermined ratios in the probabilities of winning of all the objects.

(2) Algie discloses how to display odds in a horse race, more particularly, sequentially displaying odds for a plurality of races, displaying odds for each race with changes before starting the race, and fails to disclose the above construction for correcting odds of the present invention. Furthermore, it is unthinkable that such correction is carried out in general. Accordingly, the construction of the present invention is not obvious from Algie.

(3) With regard to Algie, the examiner stated in "Response to Argument" of the detailed action in the office action (final) that " ..Algie discloses that the odds are calculated periodically before a race on an automated display device (3:6-7). At a predetermine time before the race, the CPU receives the current pari-mutuel data from the data stream received via the decoder, extracts the current odds and displays the odds data on the display board (4:41-45). The applicant's argument fails to take into account the reference and the known prior art as a whole. Algie does not have to disclose within written specification that which is well known to artisan and preferably omits that which is conventional..."

In this connection, applicant agrees with examiner's opinion in that Algie uses such conventional sequence to continually calculate the odds. However, this sequence is used to calculate the odds based on the wagering or bets only, and quite different from the correction process of the present invention.

Again, as noted above, the purpose of the Algie's invention is totally different from that of the present invention, and Algie is silent on the above special construction (correction process) of the present invention performed by the first and second correction means.

The foregoing is absolutely clear when one reads from the '977 the disclosure in column 4 starting on line 52 through line 59 which sets forth the following:

The odds display in the first column is locked (that is, the odds at the time prior to the race for the first column is continuously displayed) and the second column

then starts to display the fluctuating odds until the time prior to the race as display for the third column (see "Col. 3" above) is reached. The odds display in the second column is then locked and the third column then starts to display the fluctuating odds until the start of the race.

Accordingly, it is respectfully submitted that the '977 patent cannot be said to anticipate the claimed subject matter of independent claims 1 and 5.

In addition to the foregoing, it is submitted that dependent claims 2-4 contain patentable merit in their own right. The determining means for determining whether a payout rate based on corrected probabilities is within a predetermined allowable range of the target payout rate is not taught or suggested by the Algie '977 patent. The '977 patent does not provide a second correction means which reflects the difference in probability of winning between the predetermined and the redetermined probability. The same is true with respect to dependent claim 4. Accordingly, it is submitted that dependent claims 2-4 are patentable over the prior art.

II. CLAIMS 6-10 ARE NOT ANTICIPATED UNDER 35 U.S.C. 102(B) BY U.S. PATENT 5,564,977 TO ALGIE.

Independent claims 6, 7 and 9 all perform the following steps for correcting as noted above:

performing correction processing with said gaming machine, said correction processing including the steps of:

approximately correcting the odds on the object with a highest probability of winning to numeric data with a predetermined number of digits;
correcting the probability of winning based on the corrected odds;
obtaining the difference between the uncorrected probability of winning and the corrected probability of winning;
reflecting the difference in the probability of winning and in the odds on the object in the subsequent place;
repetitively performing the whole processing until the object with the lowest probability of winning is processed;
allocating the difference in the probabilities of winning of the last object among the corrected probabilities of winning of the objects at predetermined ratios; and...

As noted above, the Algie '977 patent does not anticipate these particular steps for correcting as set forth in independent claims 6, 7, and 9. Again, contrary to examiner's contention there is nothing in the disclosure of the '977 patent which teaches how odds are dynamically updated. The U.S. Patent Law is clear that if a claim is to be rejected under 35 U.S.C. 102(b) as being anticipated over a piece of prior art, that piece of prior art must disclose each and every step of the claimed method. In the case at hand, the '977 patent fails describe in any manner how odds are dynamically updated and how the updating is carried out. Accordingly, it is submitted that independent claims 6, 7, and 9 define over the prior art under 35 U.S.C. 102(b).

Dependent claims 8 and 10 are believed to contain patentable merit in their own right. Claim 8 requires that the correction process be performed again when quinella bets are not

within a predetermined range of the target payout. This is not taught by the prior art to Algie. With regard to dependent claim 10, the comments with respect to dependent claim 8 are incorporated herein.

In light of the foregoing, it is submitted that all of the claims, claims 1-10, define over the prior art under 35 U.S.C. 102(b) and, accordingly, the examiner's rejection of the claims under 35 U.S.C. 102(b) based on U.S. Patent 5,564,977 should be reversed.

CONCLUSION

The honorable Board of Appeals is hereby requested to reverse the Examiner's rejection of claims 1-10 based on U.S. Patent 5,564,977 under 35 U.S.C. 102(b).

APPEAL BRIEF FEE

Enclosed is a check in the amount of \$620.00 to Deposit Account No. 02-0184 to cover the Appeal Brief fee and Oral Hearing fee.

If any additional fees are required in connection with this case, it is respectfully requested that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,

Kazuhiro Kusuda et al.

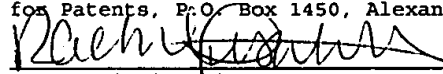
By 

Gregory P. LaPointe
Attorney for Appellant
Reg. No. 28,395
Tel: (203) 777-6628
Fax: (203) 865-0297

IN TRIPLICATE

Date: July 26, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on July 26, 2004.


Rachel Piscitelli



APPENDIX A

1. A gaming machine comprising:

game processing means for executing game processing, wherein said game processing means including dividend determining means for determining a dividend to be paid to a bettor who has won a lottery with a predetermined probability, said lottery including a plurality of objects with predetermined probabilities of winning, and for indicating the dividend to the bettor;

display means for providing an execution result executed by said dividend determining means to the bettor;

said dividend determining means comprising:

setting means for setting a target payout rate and a probability of winning of each of the objects and for setting odds on each of the objects based on the target payout rate and the probability of winning;

ordering means for arranging the objects in order of the probability of winning;

first correction means for approximately correcting the odds on the object in a highest place to odds with a predetermined number of digits, correcting the probability of winning of the object in the highest place based on the corrected odds, reflecting the difference between an uncorrected

probability of winning and the corrected probability of winning of the object in the probability of winning of the object in a subsequent place, predetermined the odds on the object in the subsequent place based on the corrected probability of winning of the object in the subsequent place, and repetitively performing a whole processing for the objects in all places; and

second correction means for approximately correcting the predetermined odds on the object in last place to odds with a predetermined number of digits, predetermining the probability of winning based on the approximated odds, and again reflecting the difference between the probability of winning and the predetermined probability of winning at predetermined ratios in the probabilities of winning of all the objects, and

wherein said display means displaying the final odds obtained by said first and second correction means.

2. A gaming machine according to Claim 1, further comprising:

determining means for determining whether a payout rate based on the corrected probabilities of winning and the corrected odds is within a predetermined allowable range of the target payout rate;

wherein, when the determination by said determining means is negative, said dividend determining means resets the probabilities of winning and again performs the processing.

3. A gaming machine according to Claim 1, wherein said second correction means again reflects the difference between the probability of winning and the redetermined probability of winning in the probabilities of winning of all the objects at the ratios among the probabilities of winning of the objects in all places.

4. A gaming machine according to Claims 2, wherein said second correction means again reflects the difference between the probability of winning and the redetermined probability of winning in the probabilities of winning of all the objects at the ratios among the probabilities of winning of the objects in all places.

5. A gaming machine comprising:
game processing means for executing game processing,
wherein said game processing means including dividend determining means for determining a dividend to be paid to a bettor who has won a lottery with a predetermined probability, said lottery including a plurality of objects with predetermined

probabilities of winning, and for indicating the dividend to the bettor;

display means for providing an execution result executed by said dividend determining means to the bettor,

said dividend determining means comprising:

setting means for setting a target payout rate and a probability of winning of each of the objects and for setting provisional odds on each of the objects based on the target payout rate and the probability of winning;

ordering means for arranging the objects in order;

first correction means for approximately correcting the odds on the object in first place to odds with a predetermined number of digits, correcting the probability of winning of the object in the first place based on the corrected odds, reflecting the difference between an uncorrected probability of winning and the corrected probability of winning of the object in the probability of winning of the object in a subsequent place, predetermining the odds on the object in the subsequent place based on the corrected probability of winning of the object in the subsequent place, and repetitively performing a whole processing for the objects in all places; and

second correction means for approximately correcting the predetermined odds on the object in last place to odds with a predetermined number of digits, predetermining the probability

of winning based on the approximated odds, and again reflecting the difference between the probability of winning and the predetermined probability of winning at predetermined ratios in the probabilities of winning of all the objects, and

wherein said display means displaying the final odds obtained by said first and second correction means.

6. An operation method for a gaming machine,

said game machine comprising:

game processing means for executing game processing, wherein said game processing means including dividend determining means for determining a dividend to be paid to a bettor who has won a bet on a race with a predetermined probability; the race including a plurality of objects with predetermined probabilities of winning, and for indicating the dividend to the bettor, and display means for providing an execution result executed by said dividend determining means;

said operation method comprising the steps of:

setting a target payout rate and a probability of winning of each of the objects and setting odds on each of the objects based on the target payout rate and the probability of winning;

rearranging data on the objects in descending order of the probability of winning; and

performing correction processing with said gaming machine,

said correction processing including the steps of:

approximately correcting the odds on the object with a highest probability of winning to numeric data with a predetermined number of digits;

correcting the probability of winning based on the corrected odds;

obtaining the difference between the uncorrected probability of winning and the corrected probability of winning;

reflecting the difference in the probability of winning and in the odds on the object in the subsequent place;

repetitively performing the whole processing until the object with the lowest probability of winning is processed;

allocating the difference in the probabilities of winning of the last object among the corrected probabilities of winning of the objects at predetermined ratios; and

displaying the final odds obtained by the correction processing on said display means.

7. An operation method for a gaming machine,

said game machine comprising:

game processing means for executing game processing, wherein said game processing means including dividend determining means for determining a dividend to be paid to a bettor who has won a bet on a lottery with a predetermined

probability in straight betting and quinella betting, said lottery including a plurality of objects with predetermined probabilities of winning, and for indicating the dividend to the bettor, and display means for providing an execution result executed by said dividend determining means,

said operation method comprising the steps of:

setting a target payout rate and a probability of winning of each of straight bets and quinella bets and setting odds on each of the straight bets and the quinella bets based on the target payout rate and the probability of winning;

rearranging data on the quinella bets in descending order of the probability of winning;

approximately correcting the odds on the quinella bet with a highest probability of winning to numeric data with a predetermined number of digits, correcting the probability of winning based on the corrected odds, obtaining the difference between an uncorrected probability of winning and the corrected probability of winning, reflecting the difference in the probability of winning and in the odds on the quinella bet in a subsequent place, repetitively performing a whole processing until the quinella bet with the lowest probability of winning is corrected, and allocating the difference in the probabilities of winning of the last quinella bet in accordance with the corrected probabilities of winning of the quinella bets;

reflecting the corrected probabilities of winning of the quinella bets in the probabilities of winning of the straight bets and predetermining the odds on the straight bets;

rearranging data on the straight bets in descending order of the probability of winning; and

performing correction processing with said gaming machine, said correction processing including the steps of:

approximately correcting the odds on the straight bet with the highest probability of winning to numeric data with a predetermined number of digits;

correcting the probability of winning based on the corrected odds;

obtaining the difference between the uncorrected probability of winning and the corrected probability of winning;

reflecting the difference in the probability of winning and in the odds on the straight bet in the subsequent place;

repetitively performing the whole processing until the straight bet with the lowest probability of winning is corrected;

allocating the difference in the probabilities of winning of the last straight bet in accordance with the corrected probabilities of winning of the straight bets, and

displaying the final odds obtained by the correction processing on said display means.

8. An operation method according to Claim 7, wherein, when actual payout rates based on the corrected probabilities of winning and the corrected odds on the straight bets and the quinella bets are not within a predetermined range of the target payout rate, the probabilities of winning in straight betting and quinella betting are reset and the correction processing is performed again.

9. An operation method for a gaming machine,
said game machine comprising:

game processing means for executing game processing,
wherein said game processing means including dividend
determining means for determining a dividend to be paid to a
bettor who has won a bet on a race with a predetermined
probability, the race including a plurality of objects with
predetermined probabilities of winning, and for indicating the
dividend to the bettor, and display means for providing an
execution result executed by said dividend determining means,

said operation method comprising the steps of:

setting a target payout rate and the probability of winning
of each of the objects and setting odds on each of the objects
based on the target payout rate and the probability of winning;

rearranging data on the objects in order; and

performing correction processing with said gaming machine,
said correction processing including the steps of:

approximately correcting the odds on the object in first
place to numeric data with a predetermined number of digits;

correcting the probability of winning based on the
corrected odds;

obtaining the difference between the uncorrected
probability of winning and the corrected probability of winning;

reflecting the difference in the probability of winning and
in the odds on the object in the subsequent place;

repetitively performing the whole processing until the
object in the last place is processed; and

allocating the difference in the probabilities of winning
of the last object in accordance with the corrected
probabilities of winning of the objects, and

displaying the final odds obtained by the correction
processing on said display means.

10. An operation method according to Claim 9, further
comprising the steps of:

again performing, when bets in straight betting and
quinella betting are set, the correction processing for
probabilities of winning and provisional odds in quinella
betting;

reflecting the corrected probabilities of winning and the corrected odds in quinella betting in probabilities of winning and odds in straight betting; and

redetermining provisional probabilities of winning and provisional odds in straight betting by the correction processing while maintaining the corrected odds and the corrected probabilities of winning in quinella betting.